

## CLAIMS

What is claimed is:

1           1.    A method of using a computer system to graphically  
2   display search results, comprising:  
3            sending a search request to a search engine, wherein the  
4   search request includes a navigation location processed into a  
5   format required by the search engine;  
6            receiving search results from the search engine, wherein  
7   the search results are proximal links related to the  
8   navigation location, wherein the proximal links are related to  
9   the search request;  
10          displaying the search results in a display area, wherein  
11   the search results are represented as graphical shapes drawn  
12   in the display area and at any given time represent data for a  
13   time quantum, and wherein the graphical shapes reference data  
14   and respond to user selections allowing a user to access  
15   referenced data.

1           2.    The method of claim 1, wherein the proximal links  
2   may be at least one navigation location.

1           3.    The method of claim 1, wherein the proximal links  
2   may be a subweb.

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1        4.    The method of claim 1, wherein the received proximal  
2 links are provided to an output target.

1        5.    The method of claim 1, wherein the graphical shapes  
2 are grouped by the inter-relatedness of the data referenced by  
3 the graphical shapes.

1        6.    The method of claim 5, wherein the inter-relatedness  
2 of the data is represented by graphical shapes, wherein  
3 subsequent data containing references within the scope of  
4 primary data are represented by subsequent graphical shapes  
5 that are enveloped by primary graphical shapes.

1        7.    The method of claim 5, wherein the inter-relatedness  
2 of the data is represented by graphical shapes, wherein  
3 subsequent data containing no references within the scope of  
4 primary data are represented by subsequent graphical shapes  
5 that do not intersect and are not enveloped by primary  
6 graphical shapes.

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1        8.    A system of using a computer to graphically display  
2 search results, comprising:  
3        means to send a search request to a search engine,  
4 wherein the search request includes a navigation location  
5 processed into a format required by the search engine;  
6        means to receive search results from the search engine,  
7 wherein the search results are proximal links related to the  
8 navigation location, wherein the proximal links are related to  
9 the search request;  
10       means to display the search results in a display area,  
11 wherein the search results are represented as graphical shapes  
12 drawn in the display area and at any given time represent data  
13 for a time quantum, and wherein the graphical shapes reference  
14 data and respond to user selections allowing a user to access  
15 referenced data.

1       9.    The system of claim 8, wherein the proximal links  
2 may be at least one navigation location.

1       10.   The system of claim 8, wherein the proximal links  
2 may be a subweb.

1       11.   The system of claim 8, wherein the received proximal  
2 links are provided to an output target.

1        12. The system of claim 8, wherein the graphical shapes  
2 are grouped by the inter-relatedness of the data referenced by  
3 the graphical shapes.

1        13. The system of claim 12, wherein the inter-  
2 relatedness of the data is represented by graphical shapes,  
3 wherein subsequent data containing references within the scope  
4 of primary data are represented by subsequent graphical shapes  
5 that are enveloped by primary graphical shapes.

1        14. The system of claim 8, wherein the inter-relatedness  
2 of the data is represented by graphical shapes, wherein  
3 subsequent data containing no references within the scope of  
4 primary data are represented by subsequent graphical shapes  
5 that do not intersect and are not enveloped by primary  
6 graphical shapes.

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1 15. A method of using a computer system for searching  
2 for relevant data, comprising:  
3 receiving a search request from a user, wherein the  
4 search request includes a search subject and navigation  
5 location;  
6 processing the search request into a format required by a  
7 search engine;  
8 sending the processed search request to the search  
9 engine, wherein the processed search request is processed for  
10 the search engine;  
11 receiving search results, which are proximal links,  
12 wherein the proximal links are related to the navigation  
13 location from the search request;  
14 determining which proximal links are relevant, wherein  
15 relevant links are those that are related to the search  
16 subject of the search request; and  
17 transmitting the search results to the user.

1 16. The method of claim 15, further comprising  
2 determining if too many proximal links have been found.

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1        17. The method of claim 15, further comprising  
2 processing relevant links for output if not too many proximal  
3 links have been found.

1        18. The method of claim 15, further comprising providing  
2 the relevant links to an output target.

1        19. The method of claim 18, wherein the output target is  
2 for is a temporal user interface.

1        20. The method of claim 15, wherein the proximal links  
2 may be at least one navigation location.

1        21. The method of claim 15, wherein the proximal links  
2 may be a subweb.

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1        22. A system of using a computer to search for  
2 information, comprising:  
3        means to obtain a query, wherein the query includes a  
4 search subject and navigation location;  
5        means to process the navigation location into a format  
6 required by a search engine;  
7        means to provide the search engine with a location  
8 request, wherein the location request is the processed  
9 navigation location;  
10       means to obtain navigation location related proximal  
11 links, wherein the location proximal links are related to the  
12 location request;  
13       means to process the location proximal links for  
14 relevance; and  
15       means to identify subject links related to the search  
16 subject from the processed location proximal links.

1       23. The system of claim 22, further comprising means to  
2 determine if an expanse breach has occurred.

1       24. The system of claim 22, further comprising means to  
2 process the identified subject links for output if no expanse  
3 breach occurred.

1        25. The system of claim 22, further comprising means to  
2 provide the processed proximal links to an output target.

1        26. The system of claim 25, wherein the output target is  
2 for is a temporal user interface.

1        27. The system of claim 22, wherein the proximal links  
2 may be at least one navigation location.

1        28. The system of claim 22, wherein the proximal links  
2 may be a subweb.

1        29. A method of using a computer to display help  
2 information, comprising:  
3        monitoring function execution;  
4        storing a current system state;  
5        determining what functions have been executed by  
6 examining latest stored system states if a request for help  
7 has been made;

8        displaying help information based on the functions that  
9 have been last executed.

1        30. The method of claim 29, further comprising  
2 determining if the last executed function has been made by  
3 mistake.

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1        31. The method of claim 30, wherein the determination  
2        that the last executed function has been made by mistake is  
3        made by a user engaging an undo function.

1        32. The method of claim 29, further comprising  
2        instantiating a latest stored system state the last executed  
3        function has been made by mistake.

1        33. An interaction computer interface invocable by an  
2        application program responsive to user selections to invoke  
3        application module commands, comprising:

4        an information pool;

5        information clouds, wherein the information clouds are  
6        data structures referencing information;

7        information crystals, wherein the information crystals  
8        reference information in information clouds and form at a  
9        passing of a temporal quantum;

10       information raindrops, wherein the information raindrops  
11       are information crystals that form in an information pool.

1        34. The interface of claim 33, wherein a liquid graphic  
2        transformation effect is applied to the information pool.

1        35. The interface of claim 33, wherein the information  
2        pool is displayed in a window.

1        36. The interface of claim 33, wherein a highlighted  
2 portion of the information pool is displayed as a subview.

1        37. The interface of claim 33, wherein the information  
2 pool includes a pool bottom.

1        38. The interface of claim 37, wherein the pool bottom  
2 displays multimedia.

1        39. The interface of claim 37, wherein the pool bottom  
2 displays advertising.

1        40. The interface of claim 33, wherein the information  
2 pool displays temporal information.

1        41. The interface of claim 33, wherein the information  
2 clouds reference information from a data analyzer.

1        42. The interface of claim 33, wherein the information  
2 crystals reference navigation locations.

1        43. The interface of claim 33, wherein the information  
2 crystals reference subjects.

1        44. The interface of claim 33, wherein the information  
2 crystals reference multimedia.

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1        45. The interface of claim 33, wherein the information  
2 crystals reference a number representing how many alternate  
3 navigation locations refer to a particular navigation  
4 location.

1        46. The interface of claim 33, wherein the information  
2 raindrops visually appear as analogue to real world raindrops  
3 falling into a pool.

1        47. The interface of claim 33, wherein groups of  
2 raindrops represent groups of data in a subweb.

1        48. The interface of claim 33, wherein the appearance of  
2 a raindrop may vary based on specified criteria.

1        49. The interface of claim 33, wherein the appearance of  
2 a raindrop may vary in color.

1        50. The interface of claim 33, wherein the appearance of  
2 a raindrop may vary in size.

1        51. The interface of claim 33, wherein the appearance of  
2 a raindrop may vary in thickness.

1        52. The interface of claim 33, wherein the appearance of  
2 a raindrop may vary in transparency.

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1        53. The interface of claim 33, wherein the appearance of  
2 a raindrop may be complimented with complementary dynamic  
3 visual cues.

1        54. The interface of claim 48, wherein a specified  
2 criterion is the type of a document.

1        55. The interface of claim 48, wherein a specified  
2 criterion is a size of a document.

1        56. The interface of claim 48, wherein a specified  
2 criterion is a number representing how many alternate  
3 navigation locations refer to a particular navigation  
4 location.

1        57. The interface of claim 48, wherein a specified  
2 criterion is a number of multimedia files at a navigation  
3 location.

1        58. The interface of claim 48, wherein a specified  
2 criterion is staleness of a link.

1        59. The interface of claim 48, wherein a specified  
2 criterion is a media content type.

1        60. The interface of claim 48, wherein a specified  
2 criterion is a subject relevancy ranking.

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1        61. The interface of claim 48, further comprising a  
2 dynamic mapping and search selection facility.

1        62. The interface of claim 61, wherein the search  
2 selection facility allows modification of the specified  
3 criteria.

1        63. The interface of claim 33, further comprising a time  
2 line facility.

1        64. The interface of claim 33, further comprising an  
2 interpretive help tool.

1        65. The interface of claim 33, further comprising a  
2 focus box.

1        66. The interface of claim 33, further comprising a  
2 skimming pebble facility.

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1        67. A method of using a computer to display data,  
2 comprising:  
3        displaying an information pool;  
4        receiving information from a data source;  
5        generating information clouds, wherein the information  
6 clouds are data structures referencing information obtained  
7 from the data source;  
8        generating information crystals, wherein the information  
9 crystals reference information in information clouds and form  
10 at a passing of a temporal quantum; and  
11        displaying information raindrops, wherein the information  
12 raindrops are information crystals that form in an information  
13 pool.

1        68. The method of claim 67, wherein the data source is a  
2 data analyzer.

1        69. The method of claim 67, further comprising applying  
2 a liquid graphic transformation effect to the information  
3 pool.

1        70. The method of claim 67, wherein the information pool  
2 is displayed in a window.

1        71. The method of claim 67, wherein a highlighted  
2        portion of the information pool is displayed as a subview.

1        72. The method of claim 67, wherein the information pool  
2        includes a pool bottom.

1        73. The method of claim 72, further comprising  
2        displaying multimedia in the pool bottom.

1        74. The method of claim 72, further comprising  
2        displaying advertising in the pool bottom.

1        75. The method of claim 67, further comprising  
2        displaying temporal information in the information pool.

1        76. The method of claim 67, wherein the information  
2        clouds obtain information from a data analyzer.

1        77. The method of claim 67, wherein the information  
2        crystals reference navigation locations.

1        78. The method of claim 67, wherein the information  
2        crystals reference subjects.

1        79. The method of claim 67, wherein the information  
2        crystals reference multimedia.

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1       80. The method of claim 67, wherein the information  
2 crystals reference a number representing how many alternate  
3 navigation locations refer to a particular navigation  
4 location.

1       81. The method of claim 67, wherein the information  
2 raindrops visually appear as analogue to real world raindrops  
3 falling into a pool.

1       82. The method of claim 67, wherein groups of raindrops  
2 represent groups of data in a subweb.

1       83. The method of claim 67, wherein the appearance of a  
2 raindrop may vary based on specified criteria.

1       84. The method of claim 67, wherein the appearance of a  
2 raindrop may vary in color.

1       85. The method of claim 67, wherein the appearance of a  
2 raindrop may vary in size.

1       86. The method of claim 67, wherein the appearance of a  
2 raindrop may vary in thickness.

1       87. The method of claim 67, wherein the appearance of a  
2 raindrop may be complimented with complementary dynamic visual  
3 cues.

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1 88. The method of claim 67, wherein the appearance of a  
2 raindrop may vary in translucency.

1 89. The method of claim 83, wherein a specified  
2 criterion is the type of a document.

1 90. The method of claim 83, wherein a specified  
2 criterion is a size of a document.

1 91. The method of claim 83, wherein a specified  
2 criterion is a number representing how many alternate  
3 navigation locations refer to a particular navigation  
4 location.

1 92. The method of claim 83, wherein a specified  
2 criterion is a number of multimedia files at a navigation  
3 location.

1 93. The method of claim 83, wherein a specified  
2 criterion is staleness of a link.

1 94. The method of claim 83, wherein a specified  
2 criterion is a media content type.

1 95. The method of claim 83, wherein a specified  
2 criterion is a subject relevancy ranking.

1 96. The method of claim 83, further comprising a dynamic  
2 mapping and search selection facility.

1        97. The method of claim 96, wherein the search selection  
2 facility allows modification of the specified criteria.

1        98. In memory, an interaction interface invocable by an  
2 application program responsive to user selections to invoke  
3 application module commands, comprising:

4        a graphical shape to represent temporal information;

5        a display area to display the graphical shapes,

6                wherein the graphical shapes drawn in the display  
7 area at any given time represent data for a time quantum,

8                wherein the graphical shapes reference data and

9 respond to user selections allowing a user to access  
10 referenced data;

11        a temporal selection facility to specify any given time  
12 quantum in a chronological data set responsive to user  
13 selections,

14                wherein the temporal selection facility is disposed  
15 in communication with the display area such that user  
16 selections specifying a time quantum instruct the display area  
17 to display temporal information for a specified time quantum  
18 from a chronological data set.

1        99. The interface of claim 98, wherein a liquid graphic  
2 transformation effect is applied to the display area.

1        100. The interface of claim 98, wherein the display area  
2 is displayed in a window.

1        101. The interface of claim 98, wherein a highlighted  
2 portion of the display area is displayed as a subview.

1        102. The interface of claim 98, wherein the display area  
2 includes a lower display layer.

1        103. The interface of claim 102, wherein the lower  
2 display layer displays multimedia.

1        104. The interface of claim 102, wherein the lower  
2 display layer displays advertising.

1        105. The interface of claim 98, wherein the display area  
2 displays temporal information.

1        106. The interface of claim 98, wherein the chronological  
2 data set is obtained from a data analyzer.

1        107. The interface of claim 98, wherein the data the  
2 shapes reference navigation locations.

1        108. The interface of claim 98, wherein the data the  
2 shapes reference multimedia.

1 109. The interface of claim 98, wherein the shapes  
2 reference data from a chronological data set.

1 110. The interface of claim 98, wherein the shapes  
2 visually appear as analogue to real world raindrops falling  
3 into a pool.

1 111. The interface of claim 98, wherein groups of shapes  
2 represent groups of data in a subweb.

1 112. The interface of claim 98, wherein the appearance of  
2 a shape may vary based on specified criteria.

1 113. The interface of claim 98, wherein the appearance of  
2 a shape may vary in color.

1 114. The interface of claim 98, wherein the appearance of  
2 a shape may vary in size.

1 115. The interface of claim 98, wherein the appearance of  
2 a shape may vary in thickness.

1 116. The interface of claim 98, wherein the appearance of  
2 a shape may vary in transparency.

1 117. The interface of claim 98, wherein the appearance of  
2 a shape may be complimented with complementary dynamic visual  
3 cues.

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1 118. The interface of claim 112, wherein a specified  
2 criterion is the type of a document.

1 119. The interface of claim 112, wherein a specified  
2 criterion is a size of a document.

1 120. The interface of claim 112, wherein a specified  
2 criterion is a number representing how many alternate  
3 navigation locations refer to a particular navigation  
4 location.

1 121. The interface of claim 112, wherein a specified  
2 criterion is a number of multimedia files at a navigation  
3 location.

1 122. The interface of claim 112, wherein a specified  
2 criterion is staleness of a link.

1 123. The interface of claim 112, wherein a specified  
2 criterion is a media content type.

1 124. The interface of claim 112, wherein a specified  
2 criterion is a subject relevancy ranking.

1 125. The interface of claim 98, further comprising a  
2 dynamic mapping and search selection facility.

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1       126. The interface of claim 125, wherein the search  
2       selection facility allows modification of the specified  
3       criteria.

1       127. The interface of claim 98, further comprising an  
2       interpretive help tool.

1       128. The interface of claim 98, further comprising a  
2       focus box.

1       129. The interface of claim 98, further comprising a  
2       skimming pebble facility.

1       130. The interface of claim 98, wherein the graphical  
2       shapes are grouped by the inter-relatedness of the data  
3       referenced by the graphical shapes.

1       131. The interface of claim 130, wherein the inter-  
2       relatedness of the data is represented by graphical shapes,  
3       wherein subsequent data containing references within the scope  
4       of primary data are represented by subsequent graphical shapes  
5       that are enveloped by primary graphical shapes.

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1 132. The interface of claim 130, wherein the inter-  
2 relatedness of the data is represented by graphical shapes,  
3 wherein subsequent data containing no references within the  
4 scope of primary data are represented by subsequent graphical  
5 shapes that do not intersect and are not enveloped by primary  
6 graphical shapes.

1 133. The interface of claim 130, wherein the inter-  
2 relatedness of the data is represented by graphical shapes,  
3 wherein subsequent data containing some references within the  
4 scope of primary data and some references outside the scope of  
5 primary data are represented by subsequent graphical shapes  
6 that intersect with primary graphical shapes.

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